For reporting on a volume basis: $R_v = \rho \times (T_{in} - T_{out}) \times P_{prbc} \times F_{rr} \times \frac{1}{r}$ For reporting on a mass basis: $R_m = (T_{in} - T_{out}) \times P_{prbc} \times F_{rr} \times \frac{1}{2}$